INTERCONNECTED BROADCAST AND SELECT OPTICAL NETWORKS WITH SHARED WAVELENGTHS

ABSTRACT

These and other objects of the present invention are achieved in a method of transmitting optical signal traffic. An all optical network is provided with at least two rings that are geographically dispersed. Each ring includes at least one transmitter and at least one receiver. The available wavelengths are separated into distinct ring bands. The optical signal traffic is shared throughout the entire optical network. Each ring is provided with its own distinct ring band of the optical signal traffic. All of the optical signal traffic is transmittable throughout the optical network. Each receiver is configured to receive only wavelengths in a ring band designated for its associated ring.